

METHOD OF AUTHENTICATING POLYMERS, AUTHENTICATABLE POLYMERS, METHODS OF MAKING AUTHENTICATABLE POLYMERS AND AUTHENTICATABLE ARTICLES, AND ARTICLES MADE THERE FROM.

ABSTRACT OF DISCLOSURE

[0134] In one embodiment, a method for authenticating that a test polymer is an authenticatable polymer is disclosed wherein the authenticatable polymer comprises a substrate polymer and a thermochromic compound, the thermochromic compound having a first signal at a first temperature and at an authenticating wavelength, and a second signal at an authenticating temperature and the authenticating wavelength, the first and second signals being different, and the authenticating temperature being greater than the first temperature, the method comprising subjecting the test polymer to a stimulus sufficient to raise a portion of the test polymer to the authenticating temperature to create a heated portion, determining a test signal of the heated portion of the test polymer at the authenticating wavelength, and authenticating that the test polymer is an authenticatable polymer if the test signal is the same as an authenticating signal of the authenticatable polymer.